NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

Spoil Spreading (acre) No. 572

Definition

Disposing of surplus excavated materials.

Purpose

To permit use of land occupied by spoil for agriculture and other purposes, to facilitate establishing and controlling vegetation along banks, to provide a travelway along banks for use and maintenance, to provide borrow for land grading, leveling, or smoothing, or to improve landscape quality.

Conditions Where Practice Applies

This practice applies to sites where spoil material is available from excavation of channels, drainage ditches, irrigation canals, or other construction sites and where it is desirable and economically feasible to achieve one or more purposes.

Federal, State, and Local Laws¹

Design and construction activities shall comply with all federal, state, and local laws, rules, and regulations governing pollution abatement, health, and safety. The owner or operator shall be responsible for securing all required permits or approvals and for performing in accordance with such laws and regulations. NRCS employees are not to assume responsibility for procuring these permits, rights, or approvals, or for enforcing laws and regulations. NRCS may provide the operator with technical landowner or information needed to obtain the required rights or approvals to construct, operate, and maintain the practice.

Permits may be required from the following agencies:

- 1. West Virginia Department of Health
- 2. West Virginia Department of Agriculture

An evaluation of the area planned for spoil spreading is recommended to ascertain if there are wetlands present in the fill areas.

Planning Considerations

Water Quantity

- 1. Effects on the water budget, especially on runoff, infiltration, deep percolation, and ground water recharge.
- 2. Effects on the distribution of snow derived soil moisture.

Water Quality

- 1. Erosion during establishment.
- 2. Effects of spoil placement on long-term erosion and sediment delivery.
- 3. Whether or not placement causes dissolved substances, including toxic, to enter surface or ground water.
- 4. Effects on visual quality of downstream water.

Design Criteria

Spoil shall be spread over a designated area according to an approved plan or as modified by a technician at the site where authorized in the contract or otherwise feasible. Provisions shall be made for the diversion or safe passage of surface water concentrating on the landside of the spoil-banks along channels, ditches, or canals. Location and placement of spoil should

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be such as to avoid unnecessary destruction of riparian vegetation.

The spoil shall be placed so as not to endanger the stability of the ditch bank and shall not exceed 3 ft. (0.9 m) in height above the natural ground surface, except by special design. The finished surface shall slope away from the edge of the channel or berm, as feasible.

For spoil spreading along channels, ditches, or canals, surfaces of spoil shall not be steeper than 4 horizontal to 1 vertical on the landside and 3 horizontal to 1 vertical on the channel side where a berm is established. Where berms are required for stability or maintenance access the minimum width of berm established shall be 8 feet. If the spoil is spread to the edge of the channel, the channel side slope of the spoil shall be shaped to join the side slope of the ditch bank so that loose spoil will not roll or wash into the channel or ditch.

Spoil spreading for other construction sites shall be in accordance with the standard and specification of the applicable conservation practices and shall be shaped to a designed form that blends visually with the landscape. Where appropriate, consideration should be given to using spoil for direct or indirect human benefits such as blocking views, deflecting or redirecting wind or snow, and other uses that may be identified as desirable.

Plans and Specifications

Plans and specifications for spoil spreading shall be in keeping with this standard and shall describe the requirements for properly applying the practice to achieve its intended purpose.

Specifications may be developed from NEH-20 Series, 700 Series, or other suitable materials, as appropriate.

Material from drainage ditches, channels or other excavations may be disposed of by spreading on adjacent land.

The shape of the finished surface shall conform to that specified on the drawings.

Construction shall be carried out in such a manner that air and water pollution, and soil

erosion are kept to a minimum and within legal limits.

The site shall be prepared for spoil spreading by removing vegetation and debris. The area should by compacted prior to placement of spoil to assure minimum settlement of the completed surface.

The following steps shall be taken to comply with this specification:

- 1. Place spoil to prevent sloughing, sliding, or washing of the spoil into an adjacent ditch or low area.
- 2. Keep chemicals, fuels, lubricants, sewage, and waste materials out of drainageways.
- 3. Establish vegetation as soon as possible on all disturbed areas.

The completed job shall present a finished appearance in conformance with the design intent.

Operation and Maintenance

An operation and maintenance plan shall be developed for spoil spreading areas. The operation and maintenance plan shall be provided to, and discussed with, the operator.

Items that should be considered in the plan are:

- 1. Periodic inspections, at least annual.
- 2. Maintenance of the area by mowing or chemical weed control.
- 3. Repair of settlement areas.
- 4. Maintenance of vegetation, where required, by fertilization, liming, or reseeding.

¹Bold italics is information added to the National standard by West Virginia.